

Claim Amendments

1 (currently amended): A composition comprising an isolated DNA molecule comprising one or more copies of TRT (SEQ ID NO:3), or a functional variant thereof that is altered from SEQ ID NO:3 only in the central crossover region, with the proviso that the DNA molecule does not comprise the entire sequence of TRT" (SEQ ID NO:4).

2 (currently amended): The composition of claim 1 wherein the DNA molecule comprises one or more copies of TRT (SEQ ID NO:3), or at the functional variant thereof, and a heterologous nucleotide sequence.

3 (currently amended): The composition of claim 1 wherein the DNA molecule comprises one or more copies of TRT (SEQ ID NO:3), or at the functional variant thereof, with the proviso that the DNA molecule does not comprise more than 200 contiguous nucleotides of the sequence TRT" (SEQ ID NO:4).

4 (previously presented): The composition of claim 3 wherein the DNA molecule does not comprise more than 100 contiguous nucleotides of TRT" (SEQ ID NO:4).

5 (previously presented): The composition of claim 3 wherein the DNA molecule does not comprise more than 32 contiguous nucleotides of TRT" (SEQ ID NO:4).

6-10 (canceled)

11 (previously presented): The composition of any one of claims 1 to 5 wherein the DNA molecule further comprises a selectable marker.

12 (previously presented): The composition of any one of claims 1 to 5 wherein the DNA molecule is a vector.

13 (currently amended): A cell transformed with a DNA molecule, said DNA molecule comprising one or more copies of TRT (SEQ ID NO:3) or a functional variant thereof that is altered from SEQ ID NO:3 only in the central crossover region, with the proviso that the DNA molecule does not comprise the entire sequence of TRT" (SEQ ID NO:4).

14 (canceled)

15 (previously presented): The cell of claim 13 wherein the DNA molecule is integrated into the chromosome of the cell.

16 (currently amended): A eukaryotic cell transformed with a DNA molecule integrated into its chromosome, said DNA molecule comprising one or more copies of TRT (SEQ ID NO:3) or a functional variant thereof that is altered from SEQ ID NO:3 only in the central crossover region, or TRT' (SEQ ID NO:2) or a functional variant thereof that is altered from SEQ ID NO:2 only in the central crossover region.

17 (previously presented): The cell of claim 16, which is a mouse embryonic stem cell.

18 (currently amended): The cell of claim 16 wherein the DNA molecule comprises two copies of TRT (SEQ ID NO:3), or at the functional variant thereof, separated by a heterologous nucleotide sequence.

19 (currently amended): The cell of claim 16 wherein the DNA molecule comprises two copies of TRT' (SEQ ID NO:2), or at the functional variant thereof, separated by a heterologous nucleotide sequence.

20 (currently amended): A kit comprising in one or more separate containers:
a) an isolated DNA molecule comprising one or more copies of TRT (SEQ ID NO:3) or a functional variant thereof that is altered from SEQ ID NO:3 only in the central crossover region; and
b) an isolated Tnpl protein, a Tnpl expression vector or a cell capable of expressing Tnpl.

21-52 (canceled)

53 (previously presented): The composition of claim 1, wherein the isolated DNA molecule comprises one or more copies of TRT (SEQ ID NO:3).

54 (previously presented): The composition of claim 1, wherein the isolated DNA molecule comprises a sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10.

55 (previously presented): The composition of claim 1, wherein the isolated DNA molecule comprises TRT' (SEQ ID NO:2).

56 (previously presented): The composition of claim 1, wherein the isolated DNA molecule comprises at least two copies of TRT (SEQ ID NO:3).

57 (previously presented): The composition of claim 1, wherein the isolated DNA molecule comprises at least two copies of TRT' (SEQ ID NO:2).

58 (previously presented): The cell of claim 13, wherein the DNA molecule comprises one or more copies of TRT (SEQ ID NO:3).

59 (previously presented): The cell of claim 13, wherein the DNA molecule comprises a sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10.

60 (previously presented): The cell of claim 13, wherein the DNA molecule comprises TRT' (SEQ ID NO:2).

61 (previously presented): The cell of claim 13, wherein the DNA molecule comprises at least two copies of TRT (SEQ ID NO:3).

62 (previously presented): The cell of claim 13, wherein the DNA molecule comprises at least two copies of TRT' (SEQ ID NO:2).

63 (previously presented): The kit of claim 20, wherein the isolated DNA molecule comprises one or more copies of TRT (SEQ ID NO:3).

64 (previously presented): The kit of claim 20, wherein the isolated DNA molecule comprises a sequence selected from the group consisting of SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, and SEQ ID NO:10.

65 (previously presented): The kit of claim 20, wherein the isolated DNA molecule comprises TRT' (SEQ ID NO:2).

66 (previously presented): The kit of claim 20, wherein the isolated DNA molecule comprises at least two copies of TRT (SEQ ID NO:3).

67 (previously presented): The kit of claim 20, wherein the isolated DNA molecule comprises at least two copies of TRT' (SEQ ID NO:2).

68 (new): The composition of claim 1, wherein the isolated DNA molecule comprises a functional variant of TRT (SEQ ID NO:3).

69 (new): The composition of claim 68, wherein the central crossover region of the functional variant is an inverted repeat.

70 (new): The cell of claim 13, wherein the DNA molecule comprises a functional variant of TRT (SEQ ID NO:3).

71 (new): The cell of claim 70, wherein the central crossover region of the functional variant is an inverted repeat.

72 (new): The eukaryotic cell of claim 16, wherein the DNA molecule comprises a functional variant of TRT (SEQ ID NO:3) or TRT' (SEQ ID NO:2).

73 (new): The eukaryotic cell of claim 72, wherein the central crossover region of the functional variant is an inverted repeat.

74 (new): The kit of claim 20, wherein the DNA molecule comprises a functional variant of TRT (SEQ ID NO:3).

75 (new): The kit of claim 74, wherein the central crossover region of the functional variant is an inverted repeat.